

REMARKS

Claims 1, 2, 4, 5, 7-9, 11-13 and 20-28 are presently pending. Of these, Claims 20-28 are withdrawn from consideration. Claim 30 is canceled without prejudice. Support for amendments to the claims is found in the Specification as filed, for example at page 9, lines 15-17. No new matter has been added herewith. The following addresses the substance of the Office Action.

Indefiniteness

Claims 1, 2, 4, 5, 7-9, 11, 12 and 30

Claims 1, 2, 4, 5, 7-9, 11, 12 and 30 were rejected under 35 U.S.C. § 112, second paragraph as being indefinite. These claims were rejected as being indefinite because the definition of E, where E is -CHR₃-CHR₄- was unclear. In particular the option of CH₂- for R₃ and R₄ caused clarity issues.

Applicants have retained the definition of E as a spacer or linker group providing a linkage between groups Band D, but removed the option whereby two or more separate sugar moieties may be attached to E at different sites. The CH₂- option for R₃ and R₄ was never intended to encompass a methylene group between the two carbons specified in the -CHR₃-CHR₄- group. Its function was to provide the option of a branch from either of the carbon atoms, to which an additional sugar moiety could be attached.

Applicants have removed CH₂- as an option for R₃ and R₄. Instead, this branching option is incorporated into the new structures provided for E. On the other hand, recitation of a CH₂ group linked to at least one sugar moiety allows for a second sugar moiety branching off linker Group E. Support for this amendment is found in the specification as filed, for example at page 9, lines 15-17. Compounds 15, 44 and 47 shown at pages 14 and 16 are examples of such compounds. The new definitions for E clarify the structural connections between Group B and the sugar groups.

The amended definition of E has clarified this group's connectivity to groups B and D without broadening the scope of the claims. The amended definition is consistent with the compounds exemplified in the Examples. Claims 8 and 11 have also been amended for consistency with the new definitions of group E and Claim 9 has been amended for consistency with the new definition of D.

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The Examiner also noted that the use of the term “comprising” in the limitation “D comprises at least one sugar moiety” was unclear with regard to which other moieties may be present as part of D. The Applicants have been amended the claims to recite closed language (i.e., “D consists of...”).

Claims 8 and 9

In Claims 8 and 9, the Examiner found that the difference between a monosaccharide chain and an oligosaccharide chain was unclear. Applicants have amended Claim 8 to recite that D comprises an α -1,2 and/or α -1,6 linked sugar moiety or an oligosaccharide chain of 2 to 12 α -1,2 and/or α -1,6 linked sugar moieties. Claim 9 is amended to recite that D consists of an optionally acylated sugar moiety or 2 to 6 optionally acetylated sugar moieties.

Claim 11

The Examiner noted that Claim 11, which depends from Claim 1, recited a contradictory definition for E. The Applicants have removed the proviso in Claim 1 which recited “when R_3 is H or CH_2 , R_4 is not H or CH_2 and that when R_4 is H or CH_2 , R_3 is not H or CH_2 ” since it is clear that E does not encompass a straight chain methylene unit. Accordingly, Claim 11 does not contradict Claim 1.

Claim 30

The Examiner indicated Claim 30 was outside of the scope of Claim 1. The Applicants have canceled Claim 30 without prejudice, thereby obviating the rejection.

In view of the amendments to the claims and the preceding remarks, the claims are believed to be in compliance with the requirements of 35 U.S.C. § 112, second paragraph.

Anticipation

van Boeckel et al.

Claims 1, 2, 4, 5, 7, 8 and 9 were rejected under 35 U.S.C. § 102(b) as being anticipated by van Boeckel et al. (1979 *Tetrahedron Letters* 37:3561-3564). The reference teaches a compound that was alleged to anticipate the claims because, although the Claim 1 recited the proviso “when R_3 is H, R_4 cannot be CH_2OH ,” no connectivity was specified for the linker.

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To overcome the rejection, the non-cyclohexyl options for E have been amended to specify the first and second carbon atoms are linked to Band D, respectively. Accordingly, the amendment distinguishes the presently claimed compounds from those disclosed by van Boeckel et al.

Severn et al.

Claims 1, 2, 4, 5, 7-9 and 12 were rejected under 35 U.S.C. § 102(b) as being anticipated by Severn et al. (WO 02/02410). The reference discloses a compound, which has an inositol linker. The Examiner pointed out that the instant specification states at page 9 that "the linking group comprises alkyl chains, which may be alicyclic, branched and/ or further substituted with hydroxyl groups. The spacer/linker may have functionality which allows the attachment of one or more sugar chains." Thus, the Examiner considers that inositol meets the limitation – cyclohexyl- in Claim 1.

The Applicants have now made clear that the –cyclohexyl- recited within the claimed definition of E is "unsubstituted or substituted with a sugar moiety," thereby obviating the rejection. Accordingly, the claims are not anticipated by Severn et al. and are in compliance with 35 U.S.C. § 102(b)

Double Patenting

Claims 1, 2, 4, 5, 7-9 and 12 were provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over Claims 1-16 of copending Application No. 10/311,340. However, Applicants note that Application No. 10/311,340 is abandoned. Thus the rejection is moot and should be withdrawn.

No Disclaimers or Disavowals

Although the present communication may include alterations to the application or claims, or characterizations of claim scope or referenced art, Applicant is not conceding in this application that previously pending claims are not patentable over the cited references. Rather, any alterations or characterizations are being made to facilitate expeditious prosecution of this application. Applicant reserves the right to pursue at a later date any previously pending or other broader or narrower claims that capture any subject matter supported by the present disclosure, including subject matter found to be specifically disclaimed herein or by any prior prosecution.

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Accordingly, reviewers of this or any parent, child or related prosecution history shall not reasonably infer that Applicant has made any disclaimers or disavowals of any subject matter supported by the present application.

CONCLUSION

In view of Applicants' amendments to the Claims and the foregoing Remarks, it is respectfully submitted that the present application is in condition for allowance. Should the Examiner have any remaining concerns which might prevent the prompt allowance of the application, the Examiner is respectfully invited to contact the undersigned at the telephone number appearing below.

Please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 11-1410.

Respectfully submitted,

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